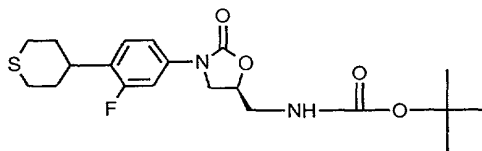


Preparation of tert-butyl {(5S)-3-[4-(1,1-dioxohexahydro-1 λ ⁶-thiopyran-4-yl)-3-fluorophenyl]-2-oxo-1,3-oxazolidin-5-yl}methylcarbamate (Compound III, R¹ = 4-(1,1-dioxohexahydro-1 λ ⁶-thiopyran-4-yl)-3-fluorophenyl, R³=t-butyl)

5 To a slurry of isobutyl 4-(1,1-dioxohexahydro-1 λ ⁶-thiopyran-4-yl)-3-fluorophenylcarbamate (1.0037 g, 2.92 mmol), and tert-butyl (2S)-3-chloro-2-hydroxypropylcarbamate (Example 3) (0.7608 g, 3.629 mmol, 1.24 eq) in DMF (1.80 ml) in an ice bath was added lithium t-butoxide in THF (18.07wt% solution, 2.7465 g, 6.20 mmol, 2.12 eq). The mixture was allowed to stand at 20-25°C for 37 h. Toluene
10 (10ml), saturated aqueous ammonium chloride (5 ml), water (5 ml) and heptane (10 ml) were added and the precipitate collected by vacuum filtration, washed with water (13.2 g) and toluene (10.2 g) and dried in a nitrogen stream to afford Compound III, wherein R¹ = 4-(1,1-dioxohexahydro-1 λ ⁶-thiopyran-4-yl)-3-fluorophenyl, R³=t-butyl, 1.1507 g (89.0%). HPLC retention time = 3.0 min (column = phenomenex Luna C8 5
15 micron, 150 X 4.6 m, flow rate = 2.0 ml/min, gradient elution from 40:60 A:B to 100:0 A:B over 15 minutes; A = acetonitrile; B = water).

EXAMPLE 10



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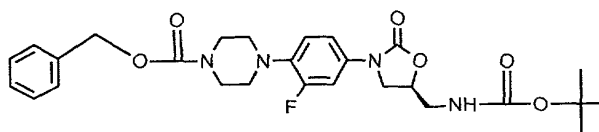
Preparation of tert-butyl [(5S)-3-(3-fluoro-4-tetrahydro-2H-thiopyran-4-ylphenyl)-2-oxo-1,3-oxazolidin-5-yl]methylcarbamate (Compound III, R¹ = 3-fluoro-4-tetrahydro-2H-thiopyran-4-ylphenyl, R³=t-butyl)

25 To a slurry of isobutyl 3-fluoro-4-tetrahydro-2H-thiopyran-4-ylphenylcarbamate (0.9142 g, 2.936 mmol) and tert-butyl (2S)-3-chloro-2-hydroxypropylcarbamate (Example 3) (0.7676 g, 3.661 mmol, 1.25 eq) in DMF (1.80 ml) in an ice bath was added lithium t-butoxide in THF (18.07wt% solution, 3.31 g, 7.46 mmol, 2.54 eq). The mixture was allowed to stand at 20-25°C for 1 day.

Saturated aqueous ammonium chloride (5 ml), water (5 ml) and methylene chloride were added and the phases separated. The aqueous was washed with methylene chloride (12 ml) and the combined organics dried on magnesium sulfate. Toluene (20 ml) was added to the organics and the solution concentrated under reduced pressure to give the Compound III, wherein $R^1 = 3\text{-fluoro-4-tetrahydro-2H-thiopyran-4-ylphenyl}$, $R^3 = t\text{-butyl}$, HPLC retention time = 7.1 min (column = phenomenex Luna C8, 5 micron 150 X 4.6 mm, flow rate = 2.0ml/min, gradient elution from 40:60 A:B to 100:0 A:B over 15 minutes; A = acetonitrile; B = water).

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EXAMPLE 11

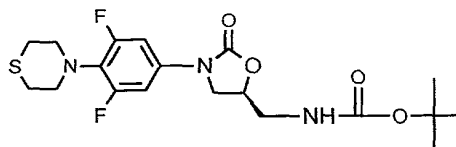


Preparation of benzyl 4-[4-((5S)-5-[(tert-butoxycarbonyl)amino]methyl]-2-oxo-1,3-oxazolidin-3-yl)-2-fluorophenyl]-1-piperazinecarboxylate (Compound III, $R^1 = 3\text{-fluoro-4-[4-(benzyloxycarbonyl)-1-piperazinyl]phenyl}$, $R^3 = t\text{-butyl}$)

To a slurry of 4-[2-fluoro-4-[(phenylmethoxy)carbonyl]amino]phenyl]-1-piperazinecarboxylic acid phenylmethyl ester (552.5 g, 1.19 mol) and tert-butyl (2S)-3-chloro-2-hydroxypropylcarbamate (Example 3) (460.8 g, 2.38 mol, 2.0 eq) in DMF (925 ml), methanol (96.4 ml, 2.38 mol, 2.0 eq), hexane (451 ml) and toluene (537 ml) was added a solution of lithium t-butoxide (285.5 g, 3.57 mmol, 3.0 eq) in hexanes rinse (1326) ml over 1.5 hours while maintaining about 15°C and followed by hexanes rinse (50 ml). The mixture was then stirred at room temperature overnight at 20-25°C. The mixture was cooled to 0°C and acetic acid (142.9 g, 2.38 moles, 2 eq) added. Methanol (290 ml) was added and the phases separated. The upper phase was washed twice with methanol (290 ml) and to the combined lower phases added methylene chloride (1300 ml) and water (1300 ml). The phases were separated and the upper phase washed twice with methylene chloride (300 ml). The combined lower phases were concentrated under reduced pressure to 2000 ml and

methanol (650 ml) was added. The mixture was concentrated to 1500 ml and toluene (630 ml) and water (650 ml) added over ½ h. Hexanes (550 ml) were added slowly and the slurry cooled to 0°C and stirred 1.5h. The precipitate was collected by vacuum filtration and washed with water and hexanes. A second crop was collected upon concentrating the filtrate. Both crops were triturated with cold methyl t-butyl ether and dried under reduced pressure to give Compound III, wherein R¹ = 3-fluoro-4-[4-(benzyloxycarbonyl)-1-piperazinyl]phenyl, R³=t-butyl, 493 g (78.2%): ¹H NMR (400 MHz, CDCl₃) δ: 1.405 (s, 9 H), 3.004 (s, 4 H), 3.52 (q, J=5, 5 Hz, d H), 3.52 (q, J=5 Hz, 2 H), 3.67 (t, J=5 Hz, 4 H), 3.80 (t, J=7 Hz, 1 H), 3.99 (t, J=9 Hz, 1 H), 4.73 (m, 1 H), 4.98 (m, 1 H), 5.16 (s, 2 H), 6.90 (t, J=9 Hz, 1 H), 7.09 (dd, J=2, 9 Hz, 1 H), 7.34 (m, 1 H), 7.37 (d, J=4 Hz, 4 H), 7.43 (dd, J=2, 14 Hz, 1 H).

EXAMPLE 12



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Preparation of tert-butyl {(5S)-3-[3,5-difluoro-4-(4-thiomorpholinyl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methylcarbamate (Compound III, R¹ = 3,5-difluoro-4-(4-thiomorpholinyl)phenyl, R³=t-butyl)

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To a solution of benzyl 3,5-difluoro-4-(4-thiomorpholinyl)phenylcarbamate (0.953 g, 2.61 mmol) and tert-butyl (2S)-3-chloro-2-hydroxypropylcarbamate (Example 3) (0.690 g, 3.29 mmol, 1.26 eq) in DMF (3.4 ml) at 0°C was added a solution of lithium t-butoxide in hexanes (1.0 M, 6.26 ml, 6.26 mmol, 2.40 eq). The mixture was stirred for 1 day at 20-25°C and DMF (0.5 ml) added. The mixture was partitioned between aqueous ammonium chloride and methylene chloride. The aqueous was washed 6 times with methylene chloride, dried on sodium sulfate and concentrated to a brown oil. The resulting oil was purified by column chromatography (ethyl acetate/ hexanes/ methanol eluent) to afford Compound III,

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